

through the air-intake openings 23,23,... by the above-mentioned suction evacuation action and always exhausted to the outside through the cylindrical shield 70' while carrying the fume generated in the laser welding, so that the protection glass 5 can prevent the fumes from adhering thereto and accordingly, not only the portions X to be welded can be welded together satisfactorily with a predetermined high energy and with a predetermined good depth without intercepting the laser beam, but also there is accompanied by such an effect that the lead bushing 1 heated during welding is air-cooled by the sucked exhaust current.--

IN THE CLAIMS:

Please amend claims 4, 5, 7, 8, 9, 11, 13 and 15, as follows:

4. (Amended) A process for producing a lead-acid battery according to claim 1 or 2, wherein the pole is provided with a columnar projection or a hollow cylindrical projection at the center of the upper end surface thereof.

5. (Amended) A process for producing a lead-acid battery according to claim 1 or 2, wherein at the time of the laser welding, a laser beam of a low output is applied and thereafter a laser beam of a high output is applied.

7. (Amended) A process for producing a lead-acid battery according to claim 1 or 2, wherein the laser welding is of a pulsed type.

8. (Amended) A process for producing a lead-acid battery according to claim 1 or 2, wherein a lap density of beads in the laser welding of a pulsed type is in a range of 6 to 12 points per mm.

9. (Amended) A process for producing a lead-acid battery according to claim 1 or 2, wherein at the time of laser-welding by applying the laser to terminal portions to be welded of the lead-acid battery, there is used such a process for laser-welding of the terminal portions that the terminal portions are surrounded by a lower cylindrical end portion of a cylindrical shield, and, in this state, fumes generated at the time of the laser-welding are sucked to be exhausted to the outside of the cylindrical shield through the exhaust port in the cylindrical shield.

11. (Amended) A process for producing a lead-acid battery according to claim 9, wherein there is used such a process for laser-welding of the terminal portions that a shroud ring having the plural number of communication openings provided circumferentially in its peripheral wall is installed in the cylindrical shield with an annular space being left between the shroud ring and the inner peripheral wall surface of the cylindrical shield so that fumes generated in the shroud ring may be sucked to be exhausted out of the cylindrical shield through the communication openings of the shroud ring, the annular space surrounding thereof and the exhaust port, together with a shielding fluid flowed through the discharge opening into the cylindrical shield.

A11 13. (Amended) A process for producing a lead-acid battery according to claim 9, wherein there is used such a process for laser-welding of the terminal portions, wherein an annular notched step is provided on a peripheral outer surface of the lead bushing defining an outer peripheral surface of the terminal portions, and the lower cylindrical end portion of the cylindrical shield having a good heat-conductivity is fitly mounted on the step thereof.

A12 15. (Amended) A laser-welding jig according to claim 14, wherein the cylindrical shield is provided with a plurality of air-intake openings disposed at an upper portion thereof, and the exhaust port communicating with the annular space is made in the side of the cylindrical shield below the air-intake openings.